

Handwritten mark



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,566	09/11/2000	Manabu Akamatsu	040894-5574	4700

9629 7590 10/04/2005
MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

EDWARDS, PATRICK L

ART UNIT	PAPER NUMBER
----------	--------------

2621

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/659,566

Applicant(s)

AKAMATSU ET AL.

Examiner

Patrick L. Edwards

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-11 and 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11,13-22 and 24 is/are rejected.
- 7) ☒ Claim(s) 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2621

DETAILED ACTION

1. The response received on 07-15-2005 has been placed in the file and was considered by the examiner. An action on the merits follows.

Response to Arguments

2. The arguments filed on 07-15-2005 have been fully considered. A response to these arguments is provided below.

35 USC 112, Second Paragraph Rejections

Summary of Argument:

Applicant has amended independent claim 10 in order to overcome the previous 112(2) rejection and argues that this rejection should be withdrawn.

Examiner's Response:

The examiner agrees. The previous 112(2) rejection is hereby withdrawn.

Prior Art Rejections

Summary of Argument:

1. Applicant alleges that that, during the recent telephone interview, the examiner suggested that circle P1 in Fig. 6 of Yoritsugu et al. as the claimed "characteristic quantities."

Examiner's Response:

1. This statement is a oversimplified characterization of what was actually discussed in the interview. The examiner's position will be explained in the below rejection.

Allowable Subject Matter

3. Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2621

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4-6, 8-11, 13-15, 17-21, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoritsugu et al. (JP 10-126614 A).

As applied to claim 1—which is representative of newly added claim 24—Yoritsugu et al. discloses an image processing system for processing an input image containing an object image of a predetermined pattern which may have been magnified (see Fig. 6 and paragraph [0038]: The reference describes an image processing system for processing an image that may have the specific pattern shown in Fig. 6.), said image processing system comprising:

Characteristic quantity computing unit that computes a plurality of characteristic quantities of said object image, wherein said plurality of characteristic quantities include pixel information representing the predetermined pattern of said object image (see Fig. 12 and paragraph [0048]: The reference describes that section 33 acts as a windowing unit as well as an image area extraction unit. The extracted image area is the characteristic quantity. For instance, Yoritsugu discloses the extraction/detection of the circle pattern part P1 (see paragraphs [0045]-[0046]). This circle pattern part, for example, includes more than one characteristic quantity (i.e. the quantity of pixels, the circle itself, the diameter, the magnification, etc.). Further, this circle pattern part P1 includes a predetermined pattern P2 (see paragraph [0038] of Yoritsugu).).

A plurality of magnification estimating means for computing a magnification on the basis of one or more characteristic quantities computed by and output from said one or more characteristic quantity computing means (see Fig. 12 and paragraphs [0047]-[0049]: The reference describes variable magnification masks 34a-34e in combination with the magnification estimating means 35. Therefore, each of the variable magnification masks is one of a plurality of magnification estimating means).

A judging means for judging whether or not said object image is present in said input image, on the basis of whether or not the plurality of estimated magnification levels are coincident with one another (see paragraphs [0047]-[0049]: The reference describes a judging means that judges whether the image data for processing is the object of the target detection based on the whether or not the estimated magnification levels are matching (i.e. whether or not they are coincident with one another).).

As applied to claim 2, Yoritsugu et al. discloses that the plurality of magnification estimating means compute said magnification in consideration of an error or errors of one or more characteristic quantities computed by said one or more characteristic quantity computing means (see paragraph [0058]: The reference describes that the magnification is determined based on a comparison between the values in the dictionaries 31a-31e and the value provided by the combination of mask 34a-34e and section 35. This comparison can be viewed as an error by section 35 and is used to determine the magnification.).

As applied to claim 4, Yoritsugu et al. discloses that the judging means synthetically judges whether or not said object image is present in said input image in consideration with an error or errors of magnification levels estimated by said plurality of magnification estimating means (see paragraph [0060]: The reference describes that the judging means 30' synthetically determines if the specific pattern is in the image based on the magnification.).

Art Unit: 2621

As applied to claim 6, which is representative of claim 5, Yoritsugu et al. discloses that the judging means judges whether or not said object image is present in said input image, from one or more characteristic quantities computed by said one or more characteristic quantity computing means and an error or errors of a plurality of magnification levels estimated by said plurality of magnification estimating means (see paragraph [0058]: The reference describes judgment section 30' for determining if the specific pattern is in the image based on the difference between the value determined by the combination of masks 34a-34e and section 35 and the value from dictionaries 31a-31e. This difference is equivalent to the error of the magnification estimating means.).

As applied to claim 8, Yoritsugu et al. discloses a resolution converting means for converting a resolution of said input image into another resolution, said resolution converting means being located at the pre-stage of said characteristic quantity computing means (see Fig. 12 and paragraph [0039]: The reference describes a resolution transducer 25 (i.e. resolution converting means) for changing the resolution of the input image into a lower resolution.).

As applied to claim 9, Yoritsugu et al. discloses a window processing means for sequentially cutting predetermined image areas out of said input image, said window processing means being located at the pre-stage of said characteristic quantity computing means (see Fig. 12 and paragraph [0046]: The reference describes a window section 33 for extracting a picture window of a predetermined area from the input image.).

As applied to claims 10, 11, 13-15, 17, and 18, which merely call for the method performed by the system of claims 1, 2, 4-6, 8, and 9, Yoritsugu et al. discloses such a method since the reference discloses the system.

As applied to claim 19, Yoritsugu et al. discloses an image forming apparatus comprising: interface means for receiving an image which may have been magnified, from an external device; image forming means for forming an image on the basis of the image data received by said interface means (see Fig. 4 and paragraph [0036]: The reference describes an image formation section 20 which carries out image formation of the image data. This image formation section has an interface that receives an input image from an external device such as a PC.), recognizing means for judging whether or not an object image is present in said input image (see Fig. 4 and paragraph [0037]: The reference describes a recognition section 22 that determines whether the specific pattern exists. This recognition section 22 includes the image processing system as described in the rejection of claim 1.); and control means for controlling an overall of said image forming apparatus, when said recognizing means judges that said object image is contained in said image data received by said interface means, said control means making said image data invalid (see Fig. 4 and paragraph [0037]: The reference describes a control section 21 that controls the overall image forming apparatus and performs output prohibition based on the results provided by the recognition section 22.).

As applied to claim 20, Yoritsugu et al. discloses that the control means performs said image invalidating process such that said control means causes said image forming means to form an image on the basis of predetermined image data and the image data received by said interface means (see paragraph [0037]: The reference describes that if the control means performs output prohibition processing, then the control means forms an image where part of the image is blacked out (i.e. on the basis of predetermined image data and the image data received by said interface means)).

Art Unit: 2621

As applied to claim 21, Yoritsugu et al. discloses that the control means performs said image invalidating process such that said control means inhibits the formation of said received image data (see paragraph [0037]: The reference describes that if the control means performs output prohibition processing, then the control means suspends output of the image data.).

As applied to claim 22, Yoritsugu discloses that the pixel information includes ON pixel information and ON/OFF inverse information (Yoritsugu Fig. 8 in conjunction with the accompanying disclosure: The reference shows that pixel information includes some pixels that are black (i.e. ON pixel information) and other pixels that are white (i.e. OFF information). The collection of these pixels constitutes ON/OFF inverse information.).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yoritsugu et al. (JP 10-126614 A) and Nakai et al. (U.S. Patent No. 5,539,523 A). The arguments as to the relevance of Yoritsugu et al. in the rejection of claim 1 above are incorporated herein.

Claim 7 calls for a specific color extracting means for extracting a specific color from said input image. This element is absent from Yoritsugu et al., but is disclosed in Nakai et al., which is in the same field of endeavor of image forming (see Fig. 10 and column 10, lines 35: The reference describes that a specific color in an image can be extracted.).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Yoritsugu et al. by adding a specific color extracting means at a pre-processing stage in the system as taught in Nakai et al. because, by extracting a specific color from an image, the image data is thinned allowing any future processing to be performed at a reduced speed (cost) (see Nakai et al.: column 6, lines 43-45).

As applied to claim 16, which merely calls for the method performed by the system of claim 7, the combination of Yoritsugu et al. and Nakai et al. discloses such a method since the combination discloses the system.

Art Unit: 2621

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (571) 272-7390. The examiner can normally be reached on 8:30am - 5:00pm M-F.

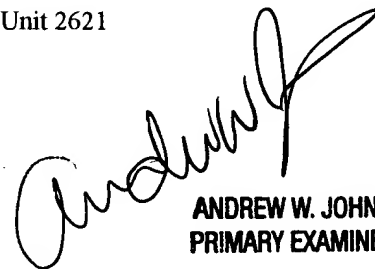
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Mancuso can be reached on (571) 272-7695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick L Edwards

Art Unit 2621

ple



ANDREW W. JOHNS
PRIMARY EXAMINER